## ABSTRACT OF SANITARY REPORTS.

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No. 19.

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#### UNITED STATES.

#### SPECIAL REPORTS.

A case of leprosy in Indiana.

The following report has been received from Assistant Surgeon George T. Vaughan, U. S. Marine-Hospital Service:

PORT OF EVANSVILLE, IND., SURGEON'S OFFICE, April 30, 1890.—I have the honor to report the admission to the hospital on the 24th instant of a case of leprosy. The patient, Charles Buck, aged twenty-five years, native of Kentucky, has passed his life in the States of Kentucky, Tennessee, and Texas, and in boating on the Ohio, Tennessee, and Cumberland Rivers, having never been out of the United States.

The disease is of the tuberculo-anæsthetic form, and the patient states that he has had it fifteen years. He is for the present isolated in a room in the City Hospital, but the secretary of the board of health has been notified.

A case of leprosy at Boston, Mass.

A case of leprosy, in the person of a Swedish woman, is reported as having recently arrived at the Boston quarantine on the Cunard steamer *Cephalonia*.

Reports of States, and yearly and monthly reports of cities.

CONNECTICUT—New Haven.—Month of March, 1890. Population, 85,000. Total deaths, 149, including scarlet fever, 1; enteric fever, 1; whooping-cough, 4; and diphtheria and croup, 17.

FLORIDA—Pensacola.—Month of April, 1890. Population, 15,000. Total deaths, 20, including phthisis pulmonalis 4 and enteric fever 1.

MICHIGAN.—Week ended April 26, 1890. Reports to the State board of health, Lansing, from 57 observers, indicate that cholera infantum, diphtheria, puerperal fever, typhoid fever, cerebro-spinal meningitis, dysentery, scarlet fever, and pleuritis increased, and that inflammation of brain, whooping-cough, cholera morbus erysipelas, and membranous croup decreased in area of prevalence.

Diptheria was reported at 26 places, scarlet fever at 26 places, enteric fever at 4 places, and measles at 41 places.

MINNESOTA.—Month of March, 1890. Reports to the State board of health show a total of 864 deaths, as against 859 for the previous month, and 1,091 for the corresponding month of 1889. The deaths included

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measles, 3; scarlet fever, 9; diphtheria, 37; croup, 9; and enteric fever, 11.

NEW JERSEY—Hudson County.—Month of March, 1890. Population, 292,734. Total deaths, 605, including measles, 3; scarlet fever, 4; diphtheria, 39; whooping-cough, 4; enteric fever, 11; and phthisis pulmonalis, 66.

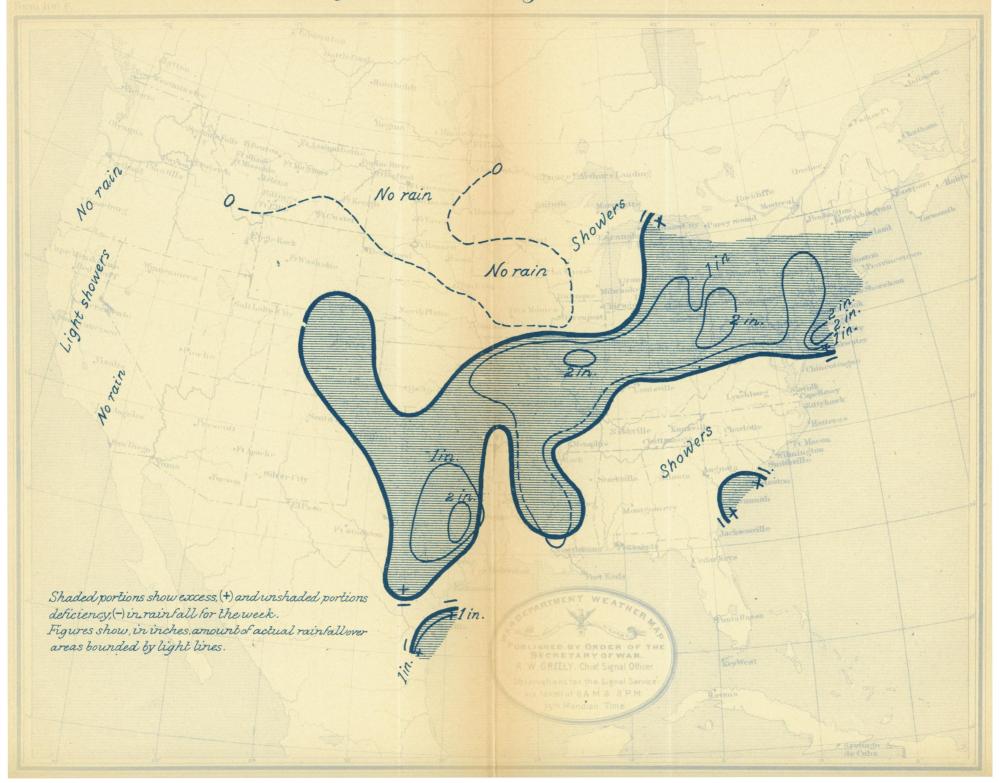
NEW YORK.—Month of March, 1890. Reports to the State board of health from 130 cities and towns, including New York and Brooklyn, show a total of 9,262 deaths, against an average of 8,468 for the month of March in the last five years. The deaths included phthisis pulmonalis, 1,195; enteric fever, 67; small-pox, 2; scarlet fever, 88; measles, 94; whooping-cough, 110; croup and diphtheria, 505; and acute respiratory diseases, 1,929.

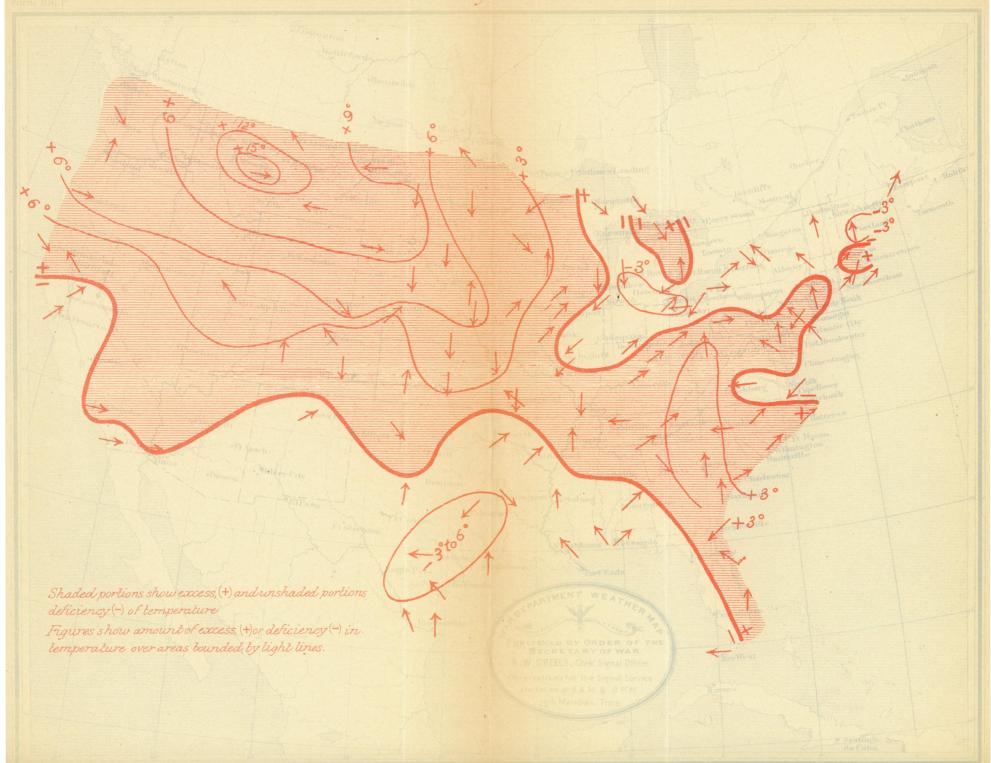
NORTH CAROLINA.—Month of March, 1890. Reports to the State board of health from 19 cities and towns, having an aggregate population of 93,400, show a total of 99 deaths, including phthisis pulmonalis, 18; enteric fever, 2; whooping cough, 2; and pneumonia, 15.

MORTALITY TABLE, CITIES OF THE UNITED STATES.

Cities.		popula-	Total deaths from all causes.	Deaths from—										
	Week ended.	Estimated pol tion.		Cholera.	Yellow fever.	Small-pox.	Varioloid.	Varicella.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping-
New York, N. Y Brooklyn, N. Y Baltimore, Md Boston, Mass Cincinnati, Ohio	May 3 May 3 May 3 May 2	1,610,813 859,612 504,343 420,000 325,000	741 342 180 179 128							1 1 4 5	12 1 3 	28 28 6 2 6	27 1 11 	5
Detroit, Mich	Apr. 29 May 3 Apr. 19 Apr. 26 May 3 May 3	250,000 250,000 240,310 240,310 240,000 227,000	75 94 110 120 103 67							3 2 3 4	2 1 1 	1 4 4 1	1 7 2	1
Milwaukee, Wis Newark, N. J Rochester, N. Y Providence, R. I Indianapolis, Ind	May 3 Apr. 26 Apr. 26 May 3 May 2	210,000 194,938 130,000 130,000 129,346	68 92 43 62 23							2 1 	1 1 1 	3 2 2 1 1	5	
Richmond, Va	May 4 May 2 May 3 May 3 May 3 May 3	100,000 92,000 69,000 68,531 43,000 42,000	44 19 26 34 19							1		2 		
Council Bluffs, Iowa Yonkers, N. Y Altoona, Pa Altoona, Pa Altoona, Pa	Apr. 26 Apr. 25 Apr. 12 Apr. 19	40,000 31,000 34,397 34,397 34,397	3 13 3 5 5									2		
Auburn, N. Y Newton, Mass Keokuk, Iowa Keokuk, Iowa Rock Island, Ill	May 3 May 3 Apr. 26 May 3 Apr. 26	26,000 22,011 16,000 16,000 16,000	11 6 3 3									 		
Rock Island, Ill Pensacola, Fla	May 4 Apr. 26	16,000 15,000	4											

# Rainfall, week ending May 2nd 1890.





Statement of temperature and precipitation for the week ending May 3, 1890.

[Received from the Signal Office, War Department.]

#### TEMPERATURE.

The week ending May 3d has been slightly cooler than usual in New England and New York, the Lake region, and the Gulf States, while the temperature was slightly in excess in the south Atlantic States, Tennessee, the Ohio Valley, northern Virginia, southern Pennsylvania, Maryland, Delaware, and the extreme southern portion of New York. The week has been moderately warm in the Northwest, while from Dakota westward to the Pacific coast unusually high temperatures prevailed, the daily average temperature, for the week ranging from 9° to 15° above the normal.

The thermal conditions for the season, from January 1 to May 3, remain substantially as reported for the previous week, except that the area of seasonal excess has advanced northward over portions of Iowa, Minnesota, and Nebraska, and the large deficiency previously reported in the northern Rocky Mountain regions has been greatly reduced by the high temperature that prevailed during the past week in that section. Over the southern and middle Atlantic States, the lower lake region, and the Ohio Valley, the average daily temperature from January 1 to May 3 has been about 4° above the normal for that period.

#### PRECIPITATION.

During the week more than the usual amount of rain occurred in New England, the lower lake region, the middle States north of Virginia, in Ohio, Indiana, Illinois, Missouri, and in portions of Mississippi, Arkansas, Louisiana, Texas, and eastern Kansas. Well-distributed showers occurred generally throughout the Southern States east of the Mississippi and in the upper lake region. Light showers occurred in Nebraska, southern Iowa, northern Minnesota, and central California, while no rain was reported from northern Iowa, Dakota, and the north Pacific coast. The rain-fall was generally heavy in the States north of the Ohio River and in portions of New England and the middle Atlantic States, Mississippi, and northern Texas.

The rain-fall for the season continues in excess generally over the Ohio and central Mississippi valleys, the Lake region, and from the Texas coast northwestward to western Nebraska and Colorado. Over the States of the lower Missouri and upper Mississippi valleys the seasonal rain-fall generally exceeds 75 per cent. of the normal, while over the greater portion of Dakota and western Minnesota there has been less than half the usual amount of rain. This last condition obtains in the south Atlantic States and along the east Gulf coast.

#### FOREIGN.

(Reports received through the Department of State and other channels.)

GREAT BRITAIN—England and Wales.—The deaths registered in 28 great towns of England and Wales during the week ended April 19 corresponded to an annual rate of 20.9 a thousand of the aggregate population, which is estimated at 9,715,559. The lowest rate was recorded in Leicester, viz, 10.9, and the highest in Bolton, viz, 34.7 a thousand. Diphtheria caused 4 deaths in Liverpool, 2 in Manchester, and 4 in Salford.

London.—One thousand six hundred and twelve deaths were registered during the week, including measles, 65; scarlet fever, 13; diphtheria, 17; whooping-cough, 106; enteric fever, 8; and diarrhea and dysentery, 11. The deaths from all causes corresponded to an annual rate of 19.0 a thousand. Diseases of the respiratory organs caused 380 deaths. In greater London 2,066 deaths were registered, corresponding to an annual rate of 18.7 a thousand of the population. In the "outer ring" the deaths included measles, 9; diphtheria, 8; and whooping-cough, 13.

Ireland.—The average annual death rate, represented by the deaths registered during the week ended April 19, in the 16 principal town districts of Ireland, was 27.5 a thousand of the population. The lowest rate was recorded in Dundalk, viz, 13.1, and the highest in Drogheda, viz, 46.5 a thousand. In Dublin and suburbs 179 deaths were registered, including typhus, 1; measles, 1; enteric fever, 1; whooping-cough, 2; and influenza, 3.

Scotland.—The deaths registered in eight principal towns during the week ended April 19 corresponded to an annual rate of 26.0 a thousand of the population, which is estimated at 1,345,563. The lowest mortality was recorded in Greenock, viz, 16.4, and the highest in Glasgow, viz, 29.8 a thousand. The aggregate number of deaths registered from all causes was 674, including measles, 41; scarlet fever, 6; diphtheria, 5; whooping-cough, 31; fever, 5; and diarrhea, 13.

BRAZIL—Ceara.—Month of March, 1890. Population, 33,000. Total deaths, 127, including yellow fever 4.

Province of Para—False report of yellow fever.—The following letter from the United States consul at Para, under date of April 19, 1890, is in reply to an inquiry from this Bureau as to the correctness of the report that an epidemic of yellow fever prevailed in the province (see Abstract No. 9, February 28):

I beg to acknowledge receipt of the Department's dispatch, No. 64,

bearing date March 19, 1890, with inclosure of a copy of a letter from the Supervising Surgeon-General of the United States Marine-Hospital Service, calling attention to a statement in the Baltimore *Deutsche Correspondent* that yellow fever is epidemic in the Province of Para, Brazil, and that fully one-third of the population have died of the disease.

In reply, I beg to state that the item taken from the said mentioned

paper is entirely false, and is without any foundation in fact.

I have only heard of three cases of yellow fever in Para this year, and the sanitary condition of this city is better than it has been for several years.

CUBA—Havana.—Week ended April 24, 1890. Seven deaths from yellow fever were reported.

BAHAMAS—Nassau, N. P.—April 26, 1890. City healthy. Weather hot and dry.

DEMERARA—Georgetown.—Week ended March 29, 1890. Population, 54,000. Deaths not reported. The prevailing diseases were phthisis pulmonalis, diseases of the bowels and kidneys, and malarial fevers.

During the month of January, 1890, there were 197 deaths, including phthisis pulmonalis, 28; pneumonia, 10; Bright's disease, 16; diarrhea 12; remittent and other malarial fevers, 9.

The births during the same month numbered 90, of which only 31 were legitimate.

UNITED STATES OF COLOMBIA—Carthagena.—The United States consul furnishes the following report, under date of April 15, 1890:

I this morning called on the members of the board of health. The president and members of said board assured me that the only disease now epidemic here is the "influenza;" that it is, as yet, milder than is reported from other countries.

There have been very few cases of yellow fever this year, about one

foreigner per month dying at the hospital, but no natives.

The rainy season, which begins next month, will undoubtedly add (as usual) greatly to the death rate; but the board of health have now arranged to isolate infectious and contagious diseases at the hospitals, and hope that, even in this abnormal year, the prevention of an epidemic can be secured, especially as few foreigners come here during the rainy season.

As steamships remain at anchor about one mile from this city there is small danger of contagion, if the crews are kept on board and ordi-

nary precautions used.

The provisions of paragraph 333–338 of the Consular Regulations, as well as those of the Department's circular of February 28, 1890, will be carefully observed, and the health officers of any United States ports threatened or in danger from this port promptly advised by me.

The steamships sailing from this port to New York take bills of health from this consulate, but those sailing from this port to New Orleans (the "Liverpool, W. I.," and the "Harrison" lines) seldom

or never take bills of health.

Pathogenic micro-organisms contained in the mouths of healthy individuals.

[Translated for this Bureau from La Rivista Internazionale d'Igiene, April, 1890.]

Vignal has observed more than twenty species of micro-organisms in the mouths of healthy individuals. Netter has conducted experiments directed solely to the pathogenic micro-organisms existing in the mouth which may determine affections in other organs. These pathogenic agents are the pneumococcus, the streptococcus pyogenes, the capsule bacillus of Friedländer, and the staphylococcus pyogenes.

The pneumococcus exists in the mouth of the healthy individual in at least 20 cases out of 100, the streptococcus in 5.5, the capsule bacillus in 4.5. These figures are probably lower than the actual proportion. Netter's results from saliva inoculations were sometimes positive, sometimes negative. The reason for this may be that the saliva did not contain pathogenic micro-organisms in sufficient quantity at a given moment of inoculation.

The pneumococcus is the pathogenic agent of pneumonitis and also determines other affections. Netter has verified its presence in 14 cases out of 43 of broncho-pneumonia, in 19 cases out of 54 of purulent pleuritis, in 26 cases out of 62 of otitis media, in 16 cases out of 25 of suppurative meningitis, and in 14 cases out of 37 of ulcerous endocarditis.

The streptococcus pyogenes is frequently found in visceral suppuration, in purulent arthritis, and in pyæmia; its identity with the streptococcus of erysipelas has been verified. Netter has observed the streptococcus 20 times in 43 in cases of broncho-pneumonitis, 27 times in 54 of purulent pneumonitis, 32 times in 62 of otitis media, 4 times in 25 of purulent meningitis, 12 times in 37 of ulcerous endocarditis, 6 times in 6 of acute cervical adentitis, 4 times in 4 of suppurative arthritis.

The pneumo-bacillus of Friedländer is found in broncho-pneumonitis and otitis media. Netter observed it in a case of ulcerous endocarditis, in 1 of purulent pleuritis, and 1 of cerebro-spinal meningitis.

The mouth is indisputably the point of departure of pathogenic

agents.

The modus of the introduction of these agents is to be considered in connection with the position and function of the mouth. Once established in the bucco-pharyngeal cavity the germs find a soil favorable to their development, thanks to temperature and the alkaline reaction of the saliva. They may remain indefinitely in the mouth and morbid phenomena fail to appear. The preventing cause is the integrity of the membrane which lines the mouth, the pharynx and the cavity with which the pharynx is connected. Gamaleia has demonstrated that a culture of pneumococcus may be injected into the trachea of a ram without determining pneumonitis. The pneumococci are absorbed and digested by the cells of the trachea and the bronches. When these cells are destroyed the development of pneumonitis follows on inoculation.

When the integrity of the membranous lining of the bucco-pharyngeal cavity is impaired in consequence of wounds, cold, or vaso motor disturbances, the development of the disease due to the particular micro-organism ensues.

Hence the frequency of some diseases and the gravity of others is diminished when the pathogenic micro-organisms of the mouth are destroyed, or when they remain innocuous.

### MORTALITY TABLE—FOREIGN CITIES.

		popula-	from	Deaths from—									
Cities.	Week ended.	Estimated pol	Total deaths all causes.	Cholera.	Yellow fever.	*Small-pox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping- cough.	
Paris Glasgow Rome Copenhagen Palermo Bristol Trieste Stuttgart Pernambuco Havre Catania Leghorn Mayence Mayence Mayence Mayence Schiedam Vera Cruz Gibraltar Kingston, Can Antigua Antigua House	Apr. 19 Mar. 8 Apr. 19 Apr. 12 Apr. 5 Apr. 12 Apr. 12 Apr. 13 Apr. 14 Apr. 14 Apr. 13 Mar. 29 Apr. 12 Apr. 12 Apr. 14 Apr. 14 Apr. 14 Apr. 12 Apr. 19 Apr. 19 Apr. 24 Apr. 14 Apr. 19	2, 260, 945 545, 678 415, 498 312, 387 250, 000 232, 248 158, 054 125, 510 120, 000 112, 074 109, 000 103, 659 65, 802 26, 802 25, 200 23, 800 23, 800 23, 801 11, 847 15, 847 15, 847 11, 793	1, 163 304 246 145 79 80 79 40 103 67 57 53 20 25 30 17 8 8 41 11 10			12	1	2 2 2 1		1 1 1 4	7 1		

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